

Figure A-22. C-12J, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer McDonnell Douglas

Aircraft Engine Manufacturer Pratt and Whitney (F117-PW-100)

No. of Engines 4 Engine Rating 37,000 lb

Min. T/O Wt. 331.4 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 580.0 k-lb Max. T/O Wt. War-Time 580.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 7,600 ft (Estimated)

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 444.1 k-lb Max. Ldg. Wt. 580.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,700 ft (Estimated)

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High		Medium	Low	Low	High	Medium	Low
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
444	47	40	43	51	32	37	45	60
580	57	54	58	71	49	56	67	88

Figure A-23. C-17A

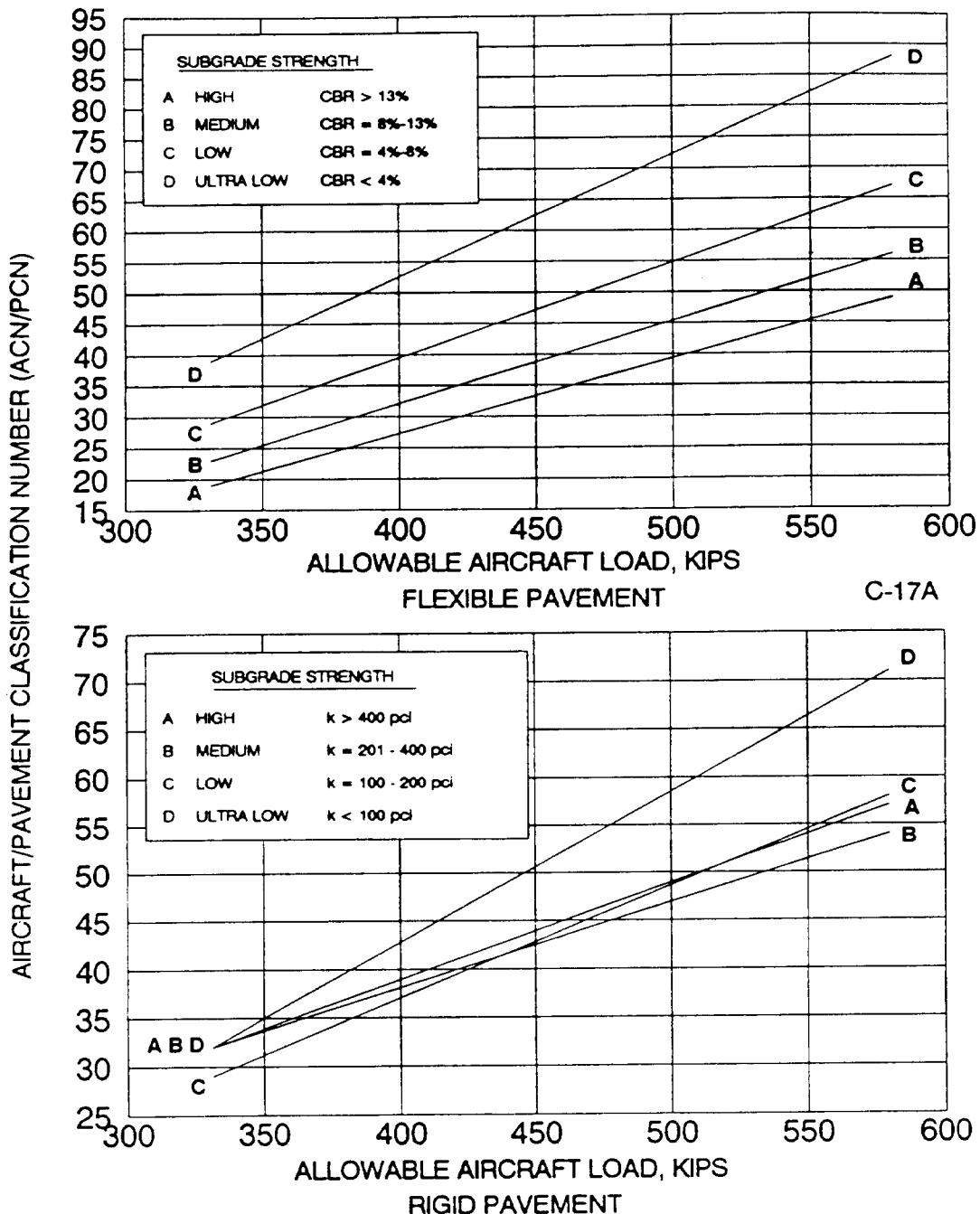


Figure A-24. C-17A, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Gulfstream Aerospace

Aircraft Engine Manufacturer Rolls-Royce (Spey Mk 511-8)

No. of Engines 2 Engine Rating 11,400 lb

Min. T/O Wt. 36.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 69.7 k-lb Max. T/O Wt. War-Time 69.7 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,700 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 5,140 ft

Min. Ldg. Wt. 36.0 k-lb Max. Ldg. Wt. 58.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 3,200 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra D	High A	Medium B	Low C	Very Low D
36	10	11	11	11	8	9	10	11
59	18	19	19	19	15	16	18	19
70	22	23	23	24	19	20	22	23

Figure A-25. C-20A/B

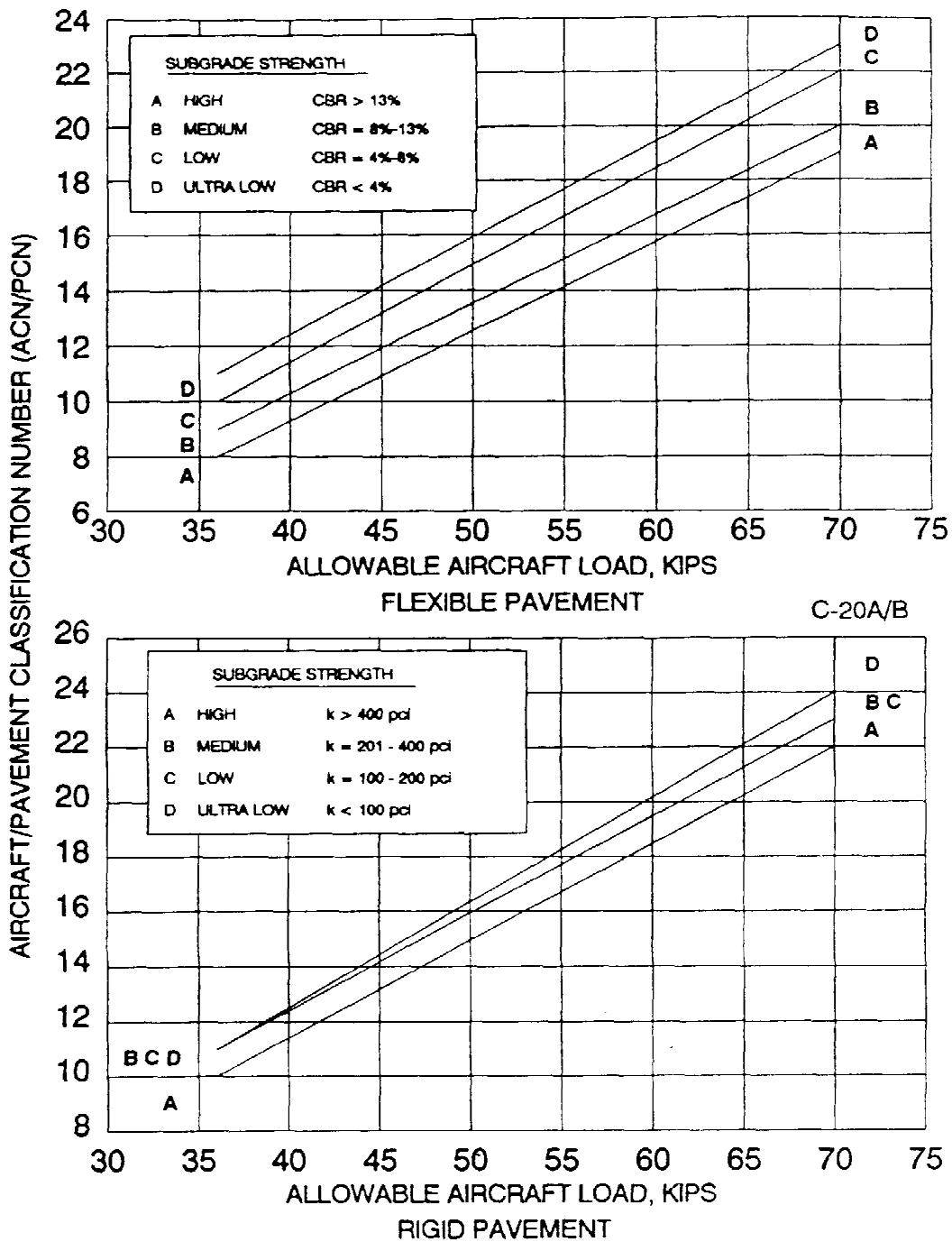


Figure A-26. C-20A/B, ACN/PCN Curves

27 Sep 91

Aircraft Manufacturer Gates LearjetAircraft Engine Manufacturer Garrett/AiResearch (TFE731-2-2B)No. of Engines 2 Engine Rating 3,500 lbMin. T/O Wt. 10.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. 2,100 ft* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 4,400 ftMax. T/O Wt. Peace-Time 18.3 k-lb Max. T/O Wt. War-Time 18.3 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,900 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 7,700 ftMin. Ldg. Wt. 10.0 k-lb Max. Ldg. Wt. 15.3 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,200 ft* Min. Ldg. Dist. @ Max. Ldg. Wt. 3,000 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
					Very			
	High A	Medium B	Low C	Ultra D	High A	Medium B	Low C	Low D
10	2	2	2	2	2	2	2	3
15	3	3	3	3	3	3	4	4
18	4	4	4	4	4	4	5	5

Figure A-27. C-21A

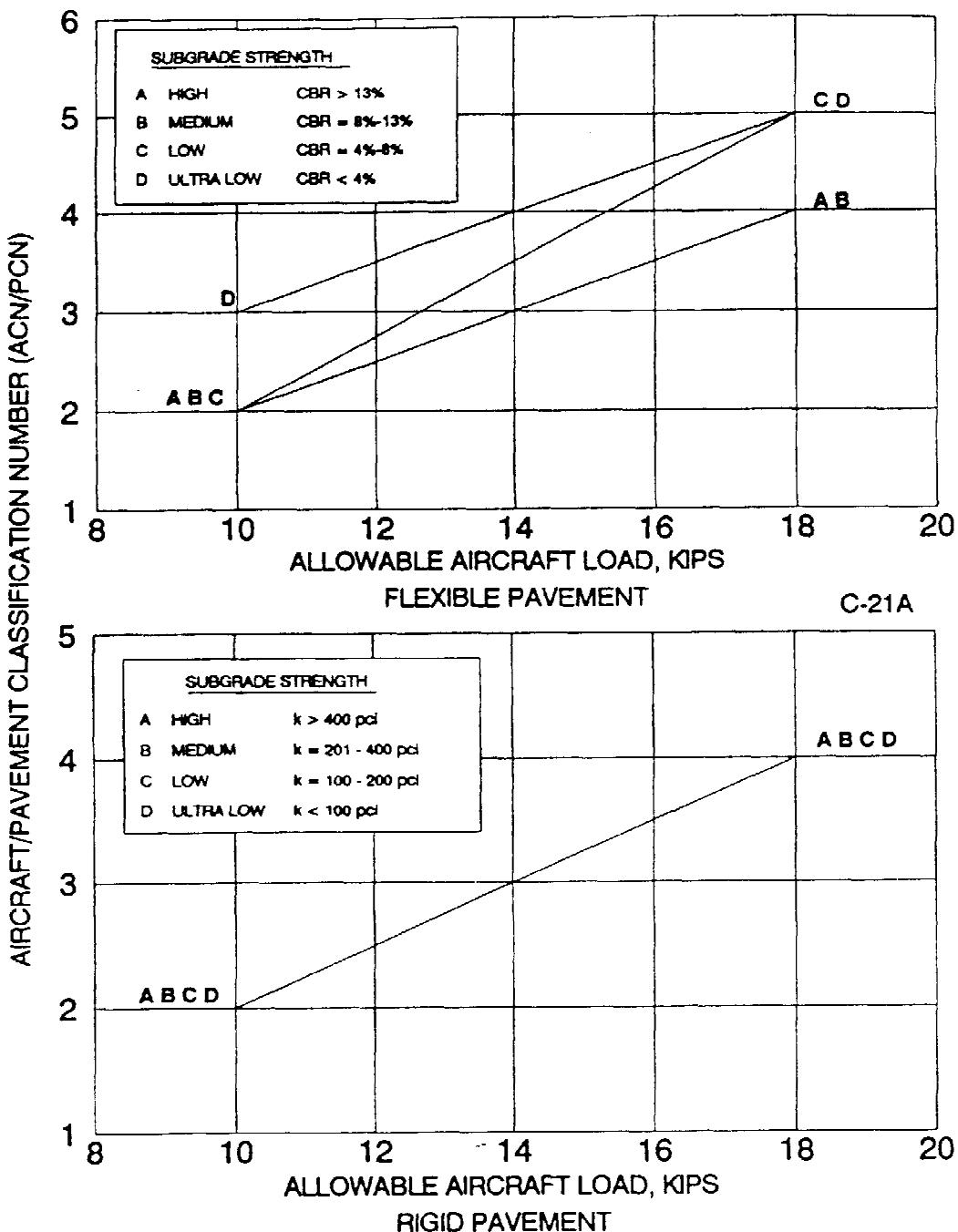


Figure A-28. C-21A, ACN/PCN Curves

27 Sep 91

Aircraft Manufacturer BoeingAircraft Engine Manufacturer Pratt and Whitney (JT8D-7)No. of Engines 3 Engine Rating 14,000 lbMin. T/O Wt. 96.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,300 ft* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,200 ftMax. T/O Wt. Peace-Time 170.0 k-lb Max. T/O Wt. War-Time 170.0 k-lb* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,700 ft* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 8,350 ftMin. Ldg. Wt. 123.0 k-lb Max. Ldg. Wt. 142.5 k-lb* Min. Ldg. Dist. @ Min. Ldg. Wt. 4,300 ft* Min. Ldg. Dist. @ Max. Ldg. Wt. 4,700 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High		Medium	Low	Ultra	High		Low
	A	B	C	D	A	B	C	D
123	32	33	35	37	28	30	33	37
143	38	39	42	44	34	35	40	44
170	46	48	51	53	41	43	49	54

Figure A-29. C-22B

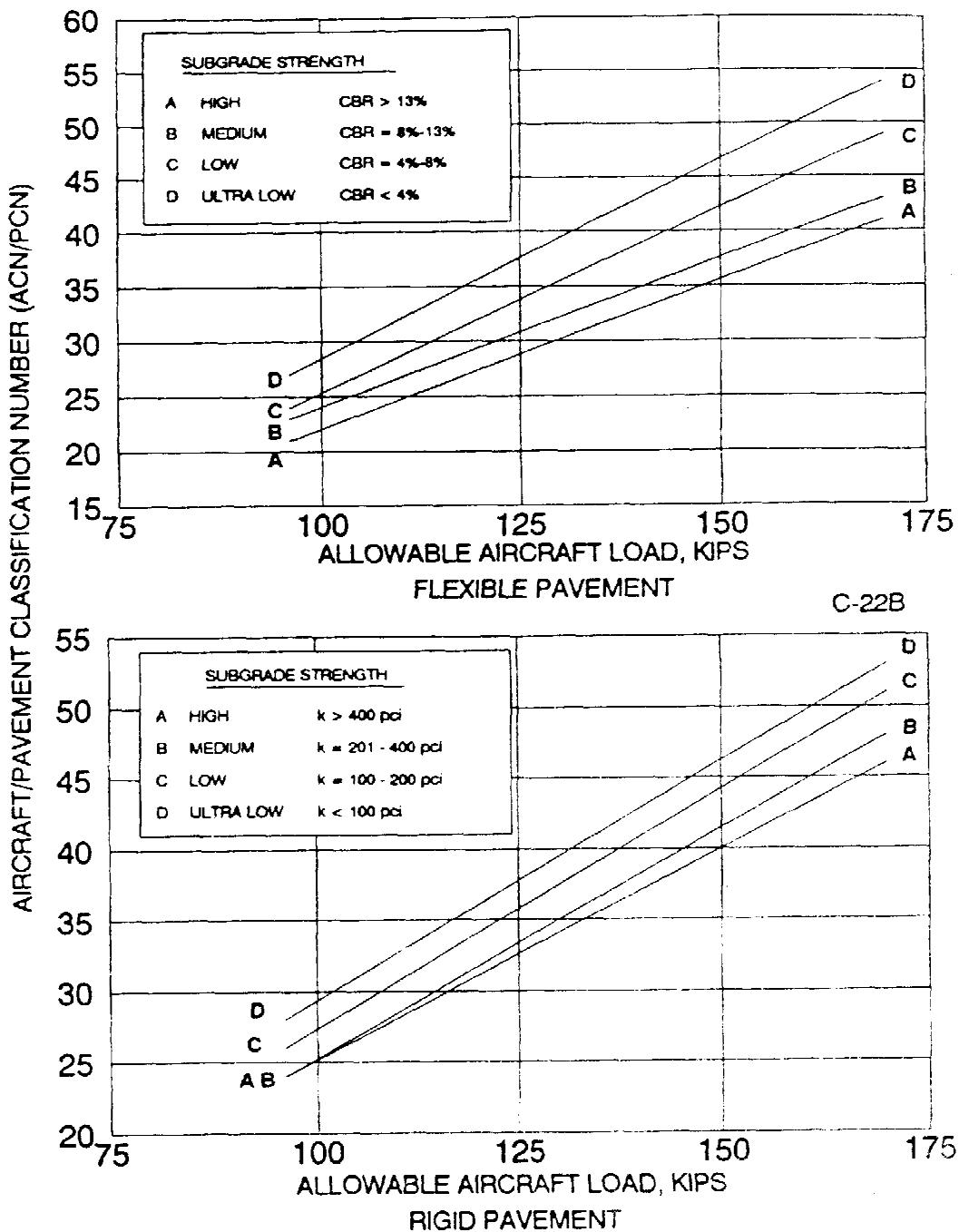


Figure A-30. C-22B, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Short Brothers

Aircraft Engine Manufacturer Pratt and Whitney of Canada (T101-PW-100)

No. of Engines 2 Engine Rating 1198 SHP

Min. T/O Wt. 17.4 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,000 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,800 ft

Max. T/O Wt. Peace-Time 22.9 k-lb Max. T/O Wt. War-Time 24.6 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 2,000 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 4,200 ft

Min. Ldg. Wt. 16.7 k-lb Max. Ldg. Wt. 22.6 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,050 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 1,500 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very Low D	
	Ultra				High A	Medium B	Low C	Low D		
	High A	Medium B	Low C	Low D						
17	4	5	5	5	3	5	5	5	5	
23	6	7	7	7	5	7	8	8	8	
25	7	8	8	8	6	8	9	9	9	

Figure A-31. C23A, Sherpa

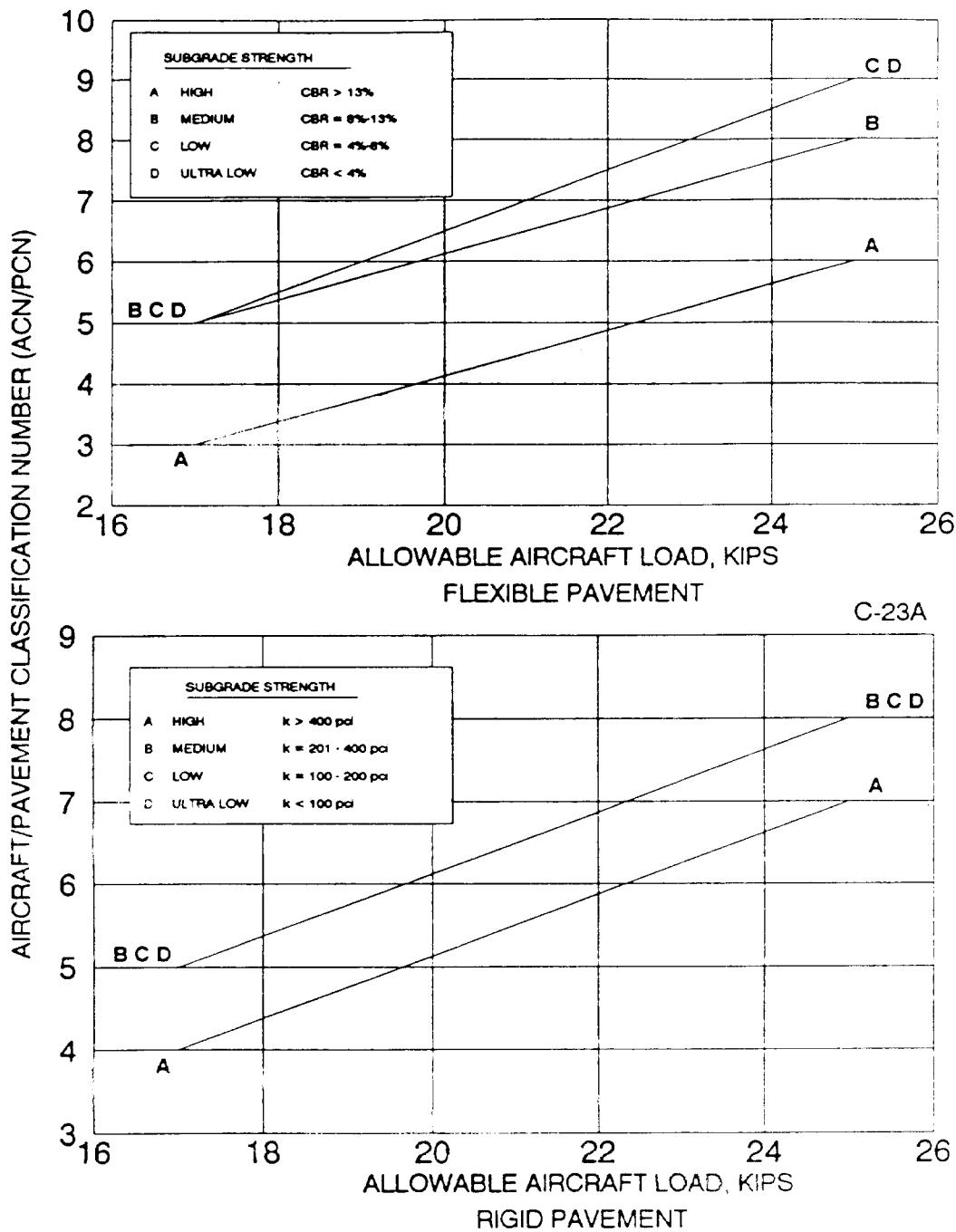


Figure A-32. C-23A, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Lockheed

Aircraft Engine Manufacturer Allison (T56-A-7B)

No. of Engines 4 Engine Rating 4910 ESHP

Min. T/O Wt. 70.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 580 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,620 ft

Max. T/O Wt. Peace-Time 135.0 k-lb Max. T/O Wt. War-Time 135.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 2,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 3,600 ft

Min. Ldg. Wt. 80.0 k-lb Max. Ldg. Wt. 135.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,300 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 1,850 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	Ultra		Low		High		Medium	
	High A	Medium B	Low C	Low D	High A	Medium B	Low C	Low D
80	10	12	13	14	8	10	13	16
135	24	27	29	31	21	23	27	32

Figure A-33. C-130B, Hercules

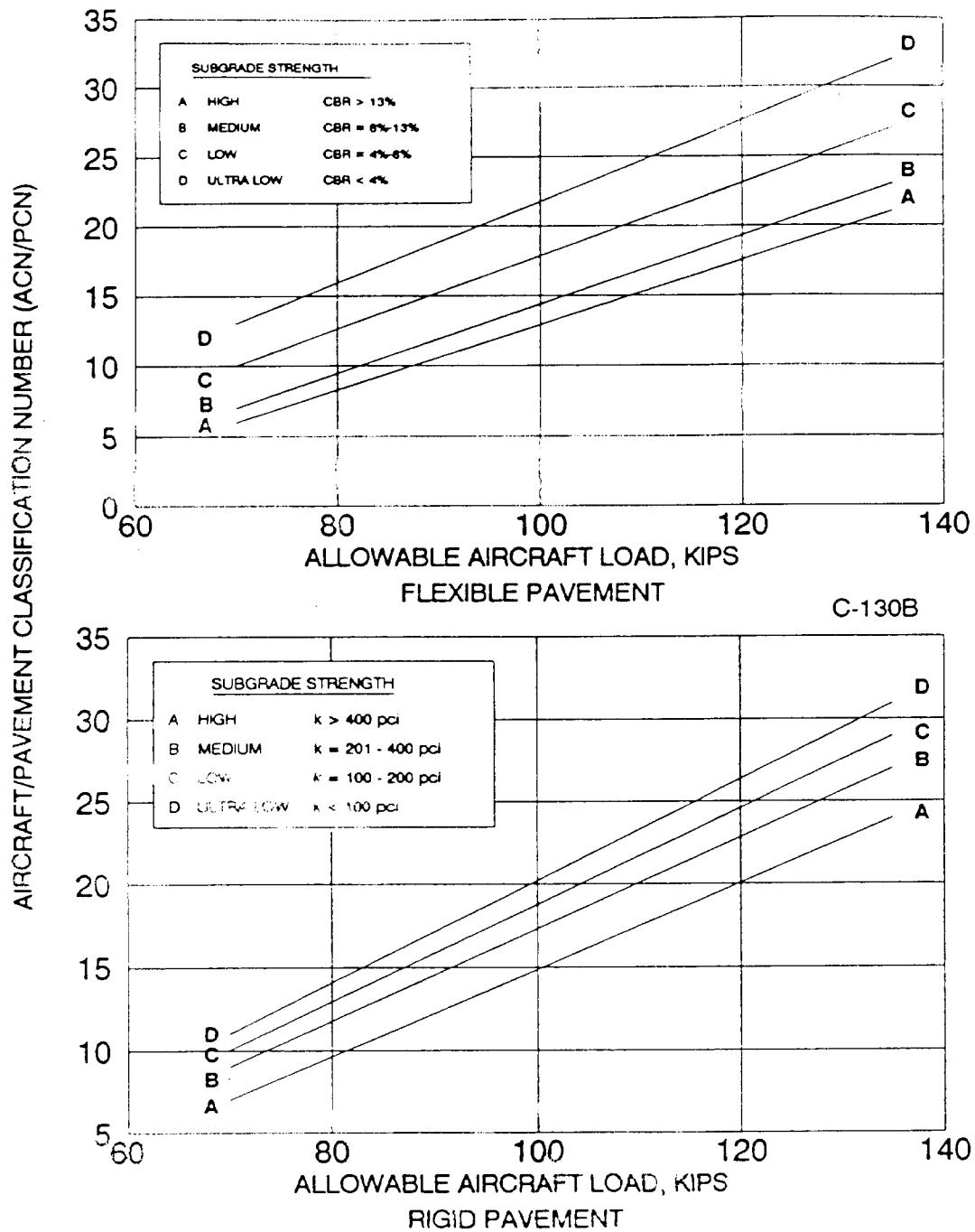


Figure A-34. C-130B, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Lockheed

Aircraft Engine Manufacturer Allison (T56-A-15)

No. of Engines 4 Engine Rating 4910 ESHP

Min. T/O Wt. 70.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 750 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,900 ft

Max. T/O Wt. Peace-Time 155.0 k-lb Max. T/O Wt. War-Time 175.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,100 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 5,500 ft

Min. Ldg. Wt. 90.0 k-lb Max. Ldg. Wt. 175.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,350 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,400 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High		Medium	Low	Ultra	High		Very
	A	B	C	D	A	B	C	D
90	11	13	16	19	12	14	16	18
155	29	31	35	37	26	29	32	37
175	34	37	41	43	30	34	37	43

Figure A-35. C-130E/H, Hercules

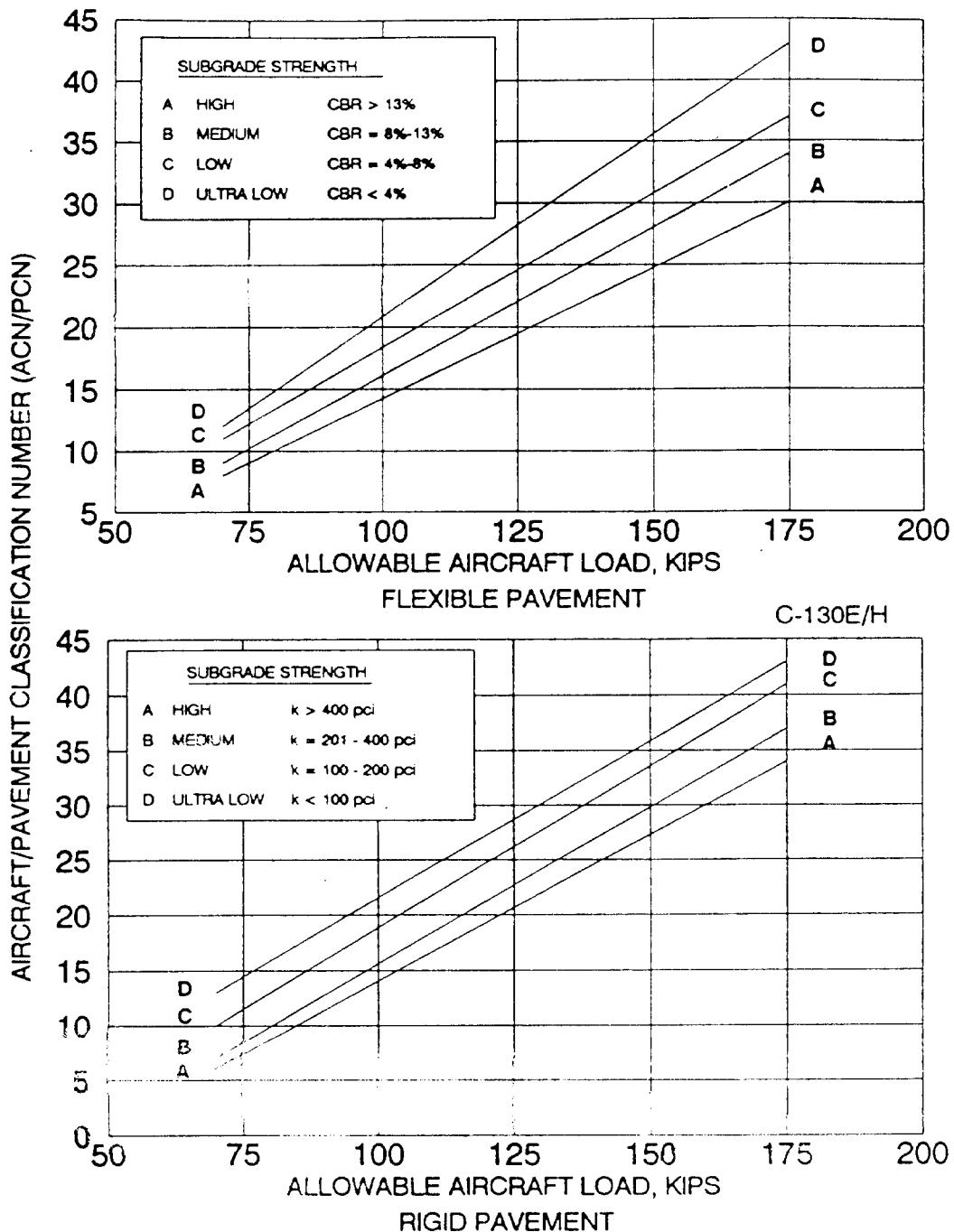


Figure A-36. C-130E/H, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (TF33-P-5)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 140.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,500 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,900 ft

Max. T/O Wt. Peace-Time 301.6 k-lb Max. T/O Wt. War-Time 301.6 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,600 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 11,250 ft

Min. Ldg. Wt. 124.0 k-lb Max. Ldg. Wt. 297.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,250 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,300 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra D	High A	Medium B	Low C	Very Low D
124	8	9	11	13	8	9	12	17
297	33	40	49	55	33	40	48	55
302	34	41	50	56	34	41	49	56

Figure A-37. C-135B, Stratolifter

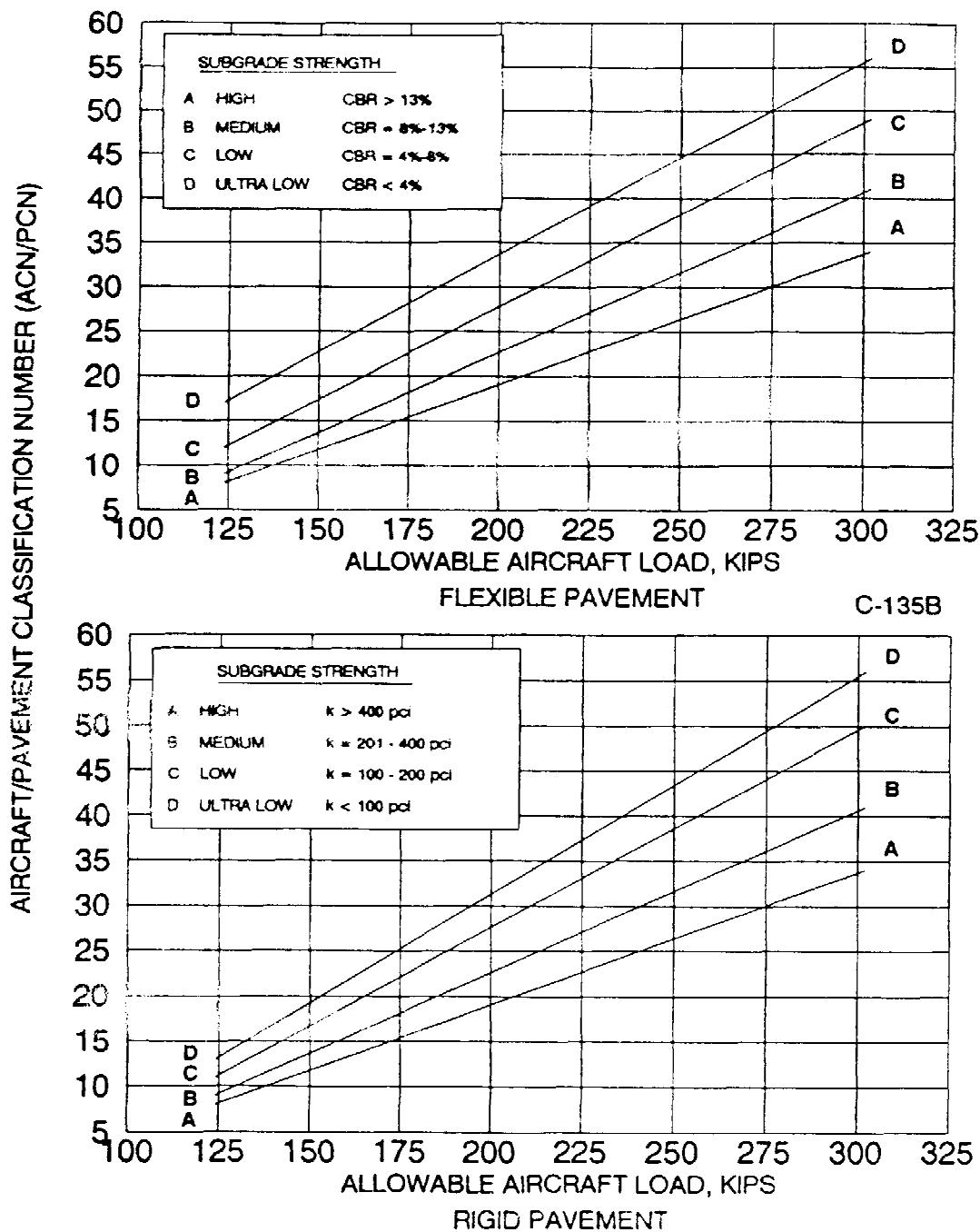


Figure A-38. C-135B, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer CFM International (F108-CF-100)

No. of Engines 4 Engine Rating 22,000 lb

Min. T/O Wt. 140.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,700 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,000 ft

Max. T/O Wt. Peace-Time 322.5 k-lb Max. T/O Wt. War-Time 322.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,700 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 11,300 ft

Min. Ldg. Wt. 123.2 k-lb Max. Ldg. Wt. 322.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,150 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 10,000 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				
	High A	Medium B	Low C	Low D	Ultra	High A	Medium B	Low C	Very Low D
123	8	9	10	12		8	9	12	16
323	37	45	54	61		37	45	54	61

Figure A-39. KC-135R, Stratotanker

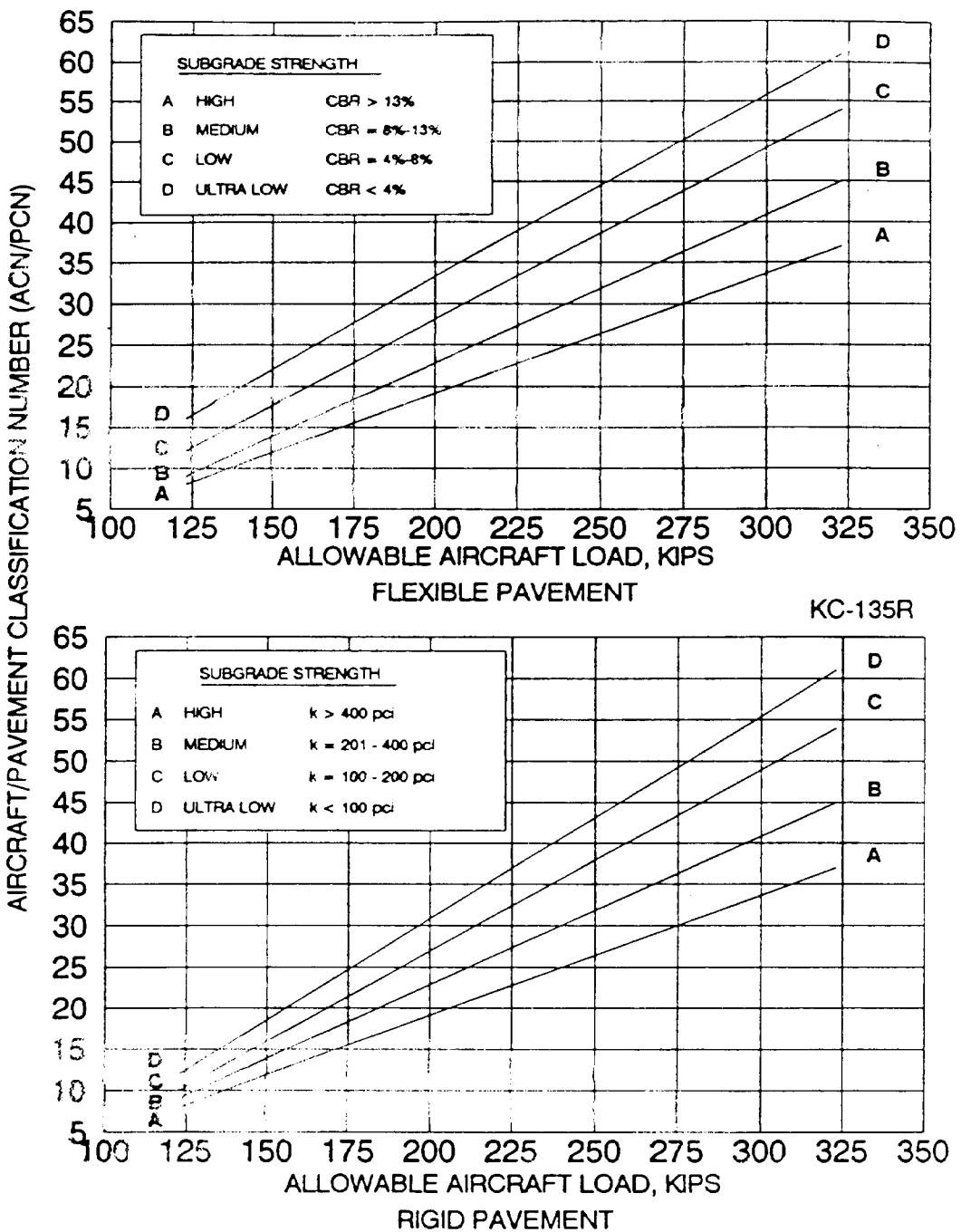


Figure A-40. KC-135R, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT3D-3B)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 135.6 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 258.0 k-lb Max. T/O Wt. War-Time 260.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,100 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 180.0 k-lb Max. Ldg. Wt. 190.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 3,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				Very Low D
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C		
180	16	17	21	26	18	20	25	33	
190	17	19	23	29	20	22	27	35	
258	26	31	35	45	31	34	42	53	
260	26	31	35	45	31	34	42	54	

Figure A-41. C-137B